



TRANS TECH CONSULTANTS

*Environmental Compliance Services
Engineers • Geologists • Planners
License # 697833 (A-Haz)*

April 28, 2005
Job No. 1543.01

Mr. Galen Hathaway
P.O. Box 100
Willits, California 95490-0100

Subject: Work Plan, Monitoring Well Abandonment
150 Main Street, Willits, California
NCRWQCB Case #1TMC537

Dear Mr. Hathaway:

This letter presents the Trans Tech Consultants (TTC) Work Plan for the abandonment of the three groundwater monitoring wells located at 150 Main Street, in Willits, California. The approximate site location is shown on the attached Site Location Map, Plate 1. Case closure was recommended in TTC's 1st Quarter 2005 Quarterly Monitoring Report, dated February 15, 2005 and subsequently approved by Colleen Stone of the North Coast Regional Water Quality Control Board (NCRWQCB).

Proposed Scope of Work

In order to proceed with the site closure process, we propose to abandon the three onsite monitoring wells (MW-1 through MW-3). The monitoring well locations and general site features are shown on the attached Site Plan, Plate 2. The monitoring well abandonment will be achieved by first removing the metal Christy boxes that protect the well. After the Christy boxes are removed, the wells seal and sand pack will be over-drilled using hollow stem auger equipment. The PVC well casing will be removed from the hole and the holes will then be tremie grouted with a cement bentonite grout. An attempt will be made to separate the metal Christy boxes, the concrete seals and the PVC casings from the drill cuttings for ordinary disposal. The remainder of the drill cuttings will be stored onsite in 55 gallon DOT approved drums pending disposal. Disposal documentation will be provided to the NCRWQCB following disposal. One 55-gallon drums of purge water also remains onsite and will be disposed of concurrently with the soil. The well abandonment will be performed by ClearHeart Drilling LLC, a C-57 licensed contractor, in accordance with state and local guidelines. Please refer to our attached Site Safety Plan for site specific health and safety issues.

Closure

Upon completion of the monitoring well abandonment and soil/ water disposal, we will prepare a brief report describing our field activities. Our report will include a description of the well abandonment activities, disposal documentation, as well as a map showing the locations of the abandoned monitoring wells.

We appreciate the opportunity to be of service to you and trust that this provides the information you require at this time. If you have any questions or require any additional information, please feel free to contact us at (707) 575-8622 or www.transtechconsultants.com.

Sincerely,
TRANS TECH CONSULTANTS



Lee Hurvitz PG 7573
Professional Geologist



Attachments: Site Location Map, Plate 1
Site Plan, Plate 2
Site Safety Plan
Distribution List





TRANS TECH CONSULTANTS

930 SHILOH RD., BLDG 44, SUITE J
WINDSOR, CA 95492
PHONE: 707-575-8622 FAX: 707-837-7334

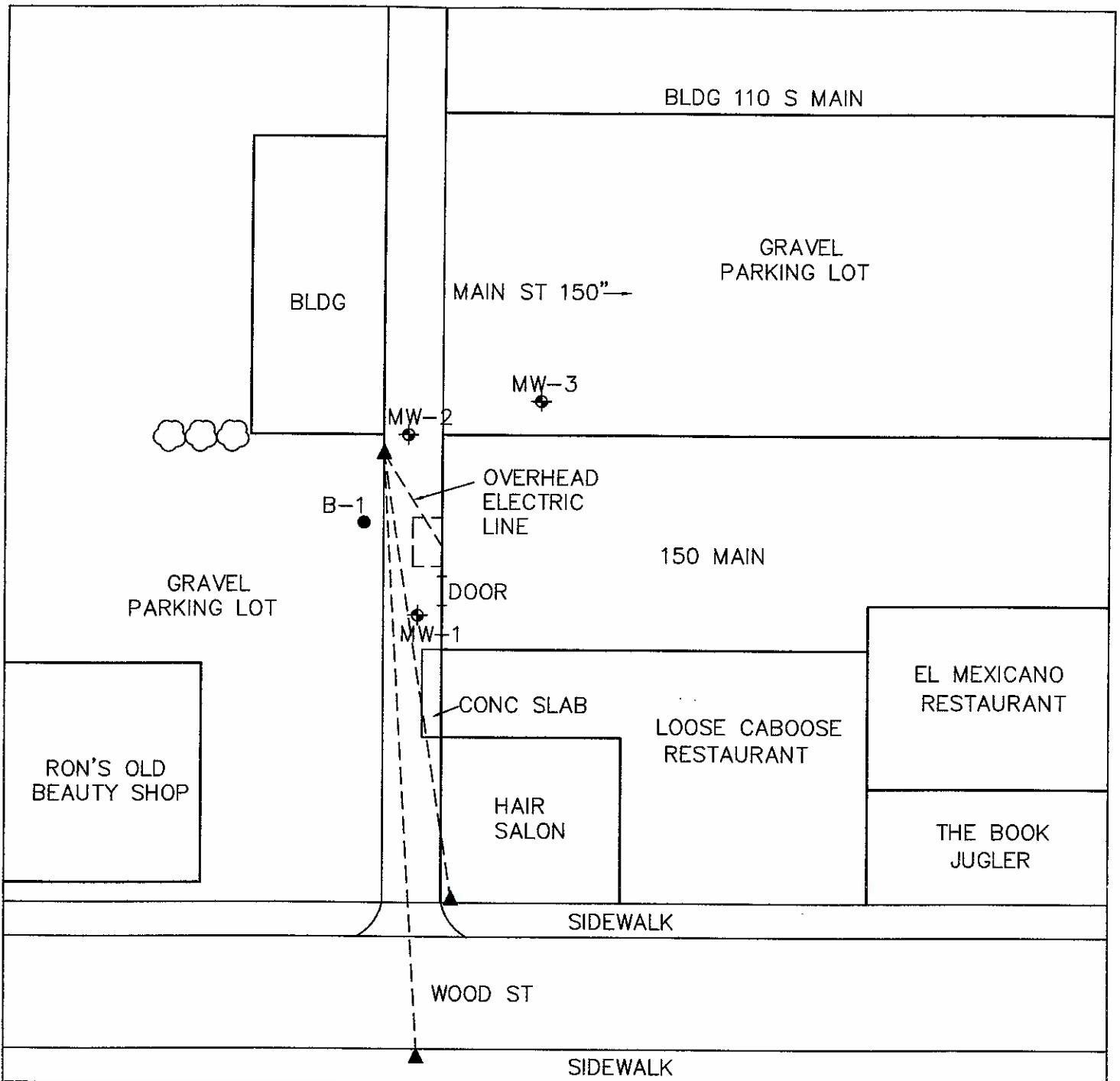
SITE LOCATION MAP





GALEN HATHAWAY
150 SOUTH MAIN ST.
WILLITS, CA

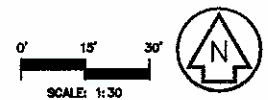
PLATE:

1

DRAWN BY: PSC	DWG NAME: 1543.01 SLM	APPR. BY: PBL	JOB NUMBER: 1543.01	W.O. NUMBER: A-295	REVISIONS:	DATE: 11/6/03
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-  UST EXCAVATION LIMITS
 TELEPHONE POLE
 MONITORING WELL LOCATION
 SOIL BORING LOCATION



TRANS TECH CONSULTANTS

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SITE PLAN

HATHAWAY
150 MAIN ST
WILLITS, CA

PLATE:

2

DRAWN BY: JLP	DWG NAME: 1543.01 SP	APPR. BY: LSH	JOB NUMBER: 1543.01	W.O. NUMBER: A-472	REVISIONS:	DATE: 6/11/04	SHEET:
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**TRANS TECH CONSULTANTS (TTC)
SITE SAFETY PLAN
Job No. 1543.01
April 2005**

Project Location: 150 Main Street, Willits, California
Job Number: 1132.01

Client: Mr. Galen Hathaway
P.O. Box 100
Willits, California 95490

BACKGROUND

On August 11, 2003, EnTerra, Inc. of Willits, California mobilized to the site to remove one underground storage tank (UST). The tank reportedly held diesel fuel, had a capacity of approximately 500 gallons, and had not been used since the mid 1980's. The location of site and general site features are presented on the attached Site Plan, Plate 2.

A backhoe was used to uncover the UST. The UST was then removed from the excavation under the direction of Mr. Wayne Briley of the Mendocino County Division of Environmental Health (MCDEH) and inspected. Significant rust and pitting were noted on the under side of the UST.

Following removal, discolored soil with a strong diesel fuel odor was noted along the base and eastern limit of the excavation. The eastern limit of the excavation was bordered by a concrete foundation supporting a permanent wood framed structure. Approximately 20 cubic yards of apparently impacted soil was removed from the tank pit excavation. The excavation extended to a depth of approximately 9 feet below ground surface (bgs). One soil sample was collected from each of the sidewalls at the base of the excavation. Additionally, one two-point composite sample was collected from the soil stockpile for disposal profiling. The soil samples collected from the tank pit and soil stockpile were analyzed for total petroleum hydrocarbons (TPH) as diesel (d), and benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Methods 5030/8015. Laboratory results of the samples collected indicated the presence of TPH-d in soil. Three monitoring groundwater wells were subsequently installed and sampled for four consecutive quarters.

SITE DESCRIPTION

The site is located in a commercial and retail area of downtown Willits. The building on the subject property is currently vacant and is undergoing renovations. The tank excavation is closely bounded on the east side by a building, and to the north, south, and west by an alleyway.

FIELD WORK

The field work will comprise abandoning three monitoring wells and two soil borings at the locations shown on the Site Plan, Plate 2. The well abandonment will be performed by overdrilling with hollow stem augers.

LEVEL OF PROTECTION

Equipment to protect the body from contact with chemical hazards has been categorized by the Environmental Protection Agency into levels A, B, C, & D. Level A equipment is used when the highest level of protection is needed; Level D equipment is used when minimum protection is needed. The chemical hazard associated with petroleum hydrocarbons is typically low and Level D protection (see equipment list below) is adequate. In case of high levels of contamination, an upgrade to Level C protection equipment may be advised. Level C and D equipment are listed below.

Level C Equipment

Level C equipment is used when the type of airborne substance is known, concentration measured, criteria for air purifying respirators (APR) is met, and skin and eye exposure is unlikely. The required equipment for this level of protection is an NIOSH/MSHA approved APR, chemical resistant clothing, chemical resistant inner and outer gloves, chemical resistant boots with steel toe and shank, hard hat, and eye protection if wearing a half face APR.

Level D Equipment

Level D equipment is primarily a work uniform, it should not be used on any site where respiratory or skin hazards exist. The required equipment for this level of protection is a dust mask or no respiratory protection, eye protection, gloves, Coveralls, chemical resistant boots or shoes with steel toe and shank, and hard hat. Tyvex overalls and Solvex or equivalent gloves are recommended. Level D equipment is required for this investigation.



EQUIPMENT REQUIRED FOR THIS INVESTIGATION

Level D equipment is required for this investigation. Normal work clothing and safety glasses may be worn for site work. Nitrile gloves, chemical resistant boots or shoes with steel toe and shank, and hard hat are also required. Air monitoring will be performed with a combustible gas meter during the investigation to determine whether an upgrade to Level C protection is advisable.

EQUIPMENT DECONTAMINATION

Decontaminate sampling equipment by steam cleaning and/or washing with a TSP wash and rinsing with de-ionized water.

SITE RESOURCES

Drinking water, telephone, and toilet facilities are available onsite.

EMERGENCY EQUIPMENT

Eyewash, emergency rinse water, first-aid kit, fire extinguisher, and respirators will be carried in the company vehicle onsite.

SITE SPECIFIC SAFETY HAZARDS

The site specific safety hazards associated with this investigation include the following

- 1) Proximity to traffic
- 2) Slips trips falls
- 3) Underground utility hazards when drilling
- 4) Overhead utility hazards
- 5) Hazards associated with heavy equipment used during drilling procedures



TELEPHONE NUMBERS

Fire Department, Sheriff, Paramedics: **911**

Hospital: Frank R. Howard Memorial Hospital
1 Madrone
Willits, California
(707) 459-6801

Client Contact: Mr. Galen Hathaway
(707) 459-4139

Poison Control Center: (800) 233-3360
(415) 821-8324

Project Manager: Bill C. Wiggins
Office: (707) 575-8622 Cell: (707) 478-2097

Safety Officer: Lee S. Hurvitz
Office: (707) 575-8622 Home: (707) 799-9482

EMERGENCY ROUTE: Map Attached



PROJECT PERSONNEL LIST AND SAFETY PLAN DISTRIBUTION RECORD

TTC Employees:

All project staff must sign, indicating they have read and understand the Safety Plan. A copy of this Safety Plan must be made available for their review and readily available at the job site.

<u>Employee Name</u>	<u>Date of H&S Training</u>	<u>Date Distributed</u>	<u>Signature</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Contractors and Subcontractors:

A copy of this Safety Plan shall be provided to contractors and subcontractors who may be affected by activities covered under the scope of this safety plan. All contractors and subcontractors must comply with applicable OSHA, EPA, and local government rules and regulations.

<u>Firm Name</u>	<u>Contact Person</u>	<u>Date Distributed</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____



Health and Safety Meeting:

All personnel participating in the project must receive initial health and safety orientation. Thereafter, a brief tailgate safety meeting is required before beginning work each day.

<u>Date</u>	<u>Name of Attendant</u>	<u>Name of Firm</u>	<u>Initials</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Visitor Log:

It is TTC policy that any visitor must furnish his/her own personal protective equipment. All visitors are required to sign the visitor log and comply with the Safety Plan requirements.

<u>Name of Visitor</u>	<u>Firm Name</u>	<u>Date of Visit</u>	<u>Signature</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

This plan is prepared to inform all field personnel, including TTC contractors and TTC subcontractors, of the potential hazards on the site.

PLAN PREPARED BY: _____

Signature

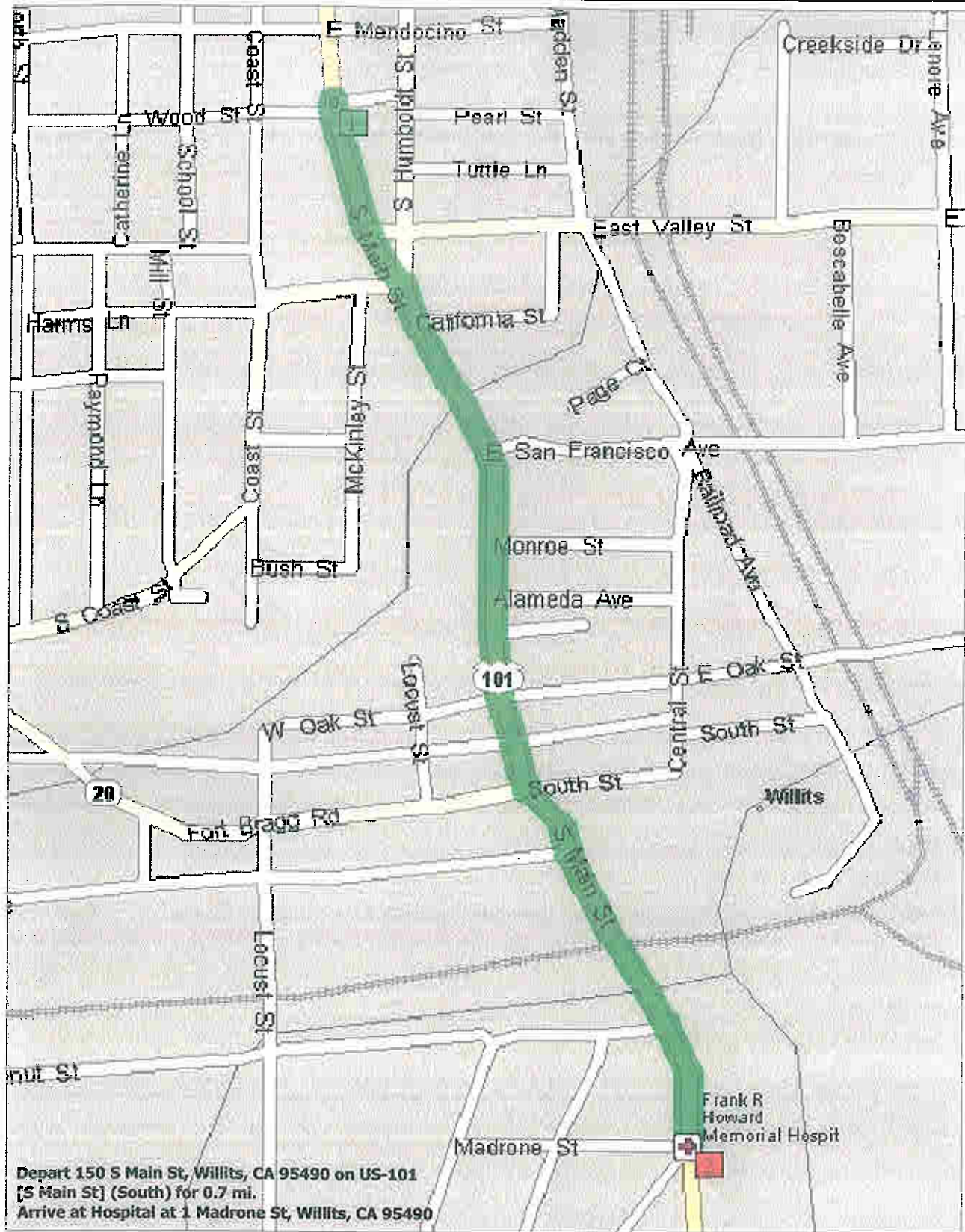
_____ Date

PLAN APPROVED BY: _____

Signature

_____ Date





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HOSPITAL ROUTE

GALEN HATHAWAY
150 SOUTH MAIN ST.
WILLITS, CA

PLATE:

1

DRAWN BY:	DWG NAME:	APPR. BY:	JOB NUMBER:	W.O. NUMBER:	REVISIONS:	DATE:
PSC	1543.01 SLM	LSH	1543.01	A-454		5/10/04

Distribution List
Work Plan-Monitoring Well Abandonment
150 Main Street
Willits, California
April 28, 2005
Job No. 1543.01

Ms. Colleen Stone
North Coast Regional Water
Quality Control Board
5550 Skylane Blvd., Suite A
Santa Rosa, California 95403

